

**U.S. Department of the Interior
Bureau of Land Management**

Environmental Assessment

Term Grazing Permit Renewal

February 2011

DOI-BLM-NV-L010-2011-0009-EA

Term Grazing Permit Renewal for Authorization #2704544 on the South Butte and South Butte Seeding Allotments.

PREPARING OFFICE

U.S. Department of the Interior
Bureau of Land Management
Egan Field Office
HC 33 Box 33500
Ely, NV 89301
775-289-1800



Environmental Assessment: Term Grazing Permit Renewal

February 2011

This page intentionally
left blank

Table of Contents

1. Introduction	1
1.1. Identifying Information:	2
1.1.1. Title, EA number, and type of project:	2
1.1.2. Location of Proposed Action:	2
1.1.3. Name and Location of Preparing Office:	3
1.1.4. Identify the subject function code, lease, serial, or case file number:	3
1.1.5. Applicant Name:	3
1.2. Purpose and Need for Action:	3
1.3. Scoping, Public Involvement and Issues:	3
2. Proposed Action and Alternatives	5
2.1. Description of the Proposed Action:	7
2.2. Description of Alternatives Analyzed in Detail:	10
2.3. Invasive, Non-Native Species and Noxious Weeds	11
2.4. Monitoring	12
2.5. Alternatives Considered but not Analyzed in Detail	12
2.6. Conformance	13
3. Affected Environment:	15
4. Environmental Effects:	23
5. Tribes, Individuals, Organizations, or Agencies Consulted:	29
6. List of Preparers	33
7. References	37
Appendix A. Maps	41
Appendix B. Standards Determination Documents	43
Appendix C. WEED RISK ASSESSMENT	45

This page intentionally
left blank

List of Figures

Figure 1. South Butte and South Butte Seeding Allotments.	41
--	----

This page intentionally
left blank

List of Tables

Table 1.1. Summary of the Standards Determination Document (SDD) by allotment for achievement of the standards.	7
Table 2.1. Summary of the Proposed Grazing Permit for Authorization #2704544	7
Table 2. Summary of the Current Grazing Permit for Authorization #2704544	10
Table 6.1. List of Preparers	35
Table C.1. Factor 1 assesses the likelihood of noxious/invasive weed species spreading to the project area.	45
Table C.2. Factor 2 assesses the consequences of noxious/invasive weed establishment in the project area.	46
Table C.3. The Risk Rating is obtained by multiplying Factor 1 by Factor 2.	46

This page intentionally
left blank

Chapter 1. Introduction

This page intentionally
left blank

This document identifies issues, analyzes alternatives, and discloses the potential environmental impacts associated with renewing the proposed term grazing permit for the permittee with authorization #2704544 on the South Butte and South Butte Seeding Allotments (Appendix A (p. 41)). The Bureau of Land Management (BLM) Egan Field Office proposes to fully process and issue a term grazing permit for the permittee with authorization #2704544 and authorizes grazing on the South Butte and South Butte Seeding Allotments. Changes to the existing permit are recommended to achieve the Standards and Guidelines for Nevada's Northeastern Great Basin Area which were developed by the Northeastern Great Basin Resource Advisory Council (RAC).

The South Butte Allotment does occur within the Triple B Wild Horse Herd Management Area (HMA).

This grazing permit was originally renewed under the Categorical Exclusion (CX) authority in 2008 (Categorical Exclusion NV-043-08-012), but the decision was then vacated as a result of a settlement negotiation between the U.S. Department of Justice and Western Watershed Project to resolve litigation (WWP v. Lane. Case No. 07-cv-394-BLW) challenging BLM's use of certain categorical exclusions to satisfy the requirements of the National Environmental Policy Act (NEPA). Under the terms of this agreement, BLM has agreed to vacate its October 30, 2008 decision for the South Butte Allotment and the South Butte Seeding Allotment, since it relies on a categorical exclusion to satisfy NEPA. Because BLM vacated the October 30, 2008 decision renewing the term grazing permit, BLM issued a new term grazing permit in 2009 under the authority of Section 426, Public Law 111-8 until such time as BLM could complete its processing of a new term grazing permit.

Monitoring data were reviewed and an assessment of the rangeland health was completed in 2011 during the term permit renewal process through a Standards Determination Document (SDD) for the South Butte and South Butte Seeding Allotments (Appendix B (p. 43)). The following is a summary of the South Butte and South Butte Seeding SDD for achievement of the standards.

Table 1.1. Summary of the Standards Determination Document (SDD) by allotment for achievement of the standards.

Allotment	STANDARD 1 Upland Sites	STANDARD 2 Riparian and Wetland Sites	STANDARD 3 Habitat
South Butte (00504)	Standard Achieved	Standard Achieved	Not achieving the Standard, but making significant progress towards achieving the Standard; Current livestock grazing was not a significant contributing causal factor; Additional causal factors include climatic factors, altered natural disturbance regimes, and historic livestock grazing.
South Butte Seeding (00506)	Standard Achieved	Not Applicable	Standard Achieved
<p>Definitions per the BLM Manual H-4180-1 – Rangeland Health Standards (1/19/01)</p> <p>Significant Progress: Movement toward meeting standards and conforming to guidelines that is acceptable in terms of rate and magnitude. Acceptable levels of rate and magnitude must be realistic in terms of the capability of the resource, but must also be as expeditious and effective as practical.</p> <p>Significant Factor: Principal causal factor in the failure to achieve the land health standard(s) and conform with the guidelines. A significant factor would typically be a use that, if modified, would enable an area to achieve or make significant progress toward achieving the land health standard(s). To be a significant factor, a use may be one of several causal factors contributing to less-than-healthy conditions; it need not be the sole causal factor inhibiting progress towards the standards.</p>			

Current management practices have been implemented since the Final Multiple Use Decisions were issued for the South Butte Allotment on December 24, 1992 and for the South Butte Seeding Allotment on January 27, 1992.

1.1. Identifying Information:

1.1.1. Title, EA number, and type of project:

Term Grazing Permit Renewal for Authorization #2704544 on the South Butte and South Butte Seeding allotments, DOI-BLM-NV-L010-2011-0009-EA

1.1.2. Location of Proposed Action:

The proposed action occurs within White Pine County, Nevada and is situated approximately 20-30 miles northwest of Ely, Nevada. These allotments are located in southern Butte Valley Nevada and in the legals T19N, R61E, T19N, R62E, T20N, R61E and T20N, R62E.

The South Butte Allotment does occur within the Triple B Wild Horse Herd Management Area (HMA).

1.1.3. Name and Location of Preparing Office:

Lead Office - Egan FO and number LLNVL01000

1.1.4. Identify the subject function code, lease, serial, or case file number:

Case File Number 2704544

1.1.5. Applicant Name:

Authorization #2704544

1.2. Purpose and Need for Action:

The purpose and need is to authorize and manage livestock grazing use on the South Butte (00504) and South Butte Seeding (00506) Allotments in a manner and at levels consistent with multiple uses, sustained yield, and watershed function and health of the public lands in accordance with all applicable laws, regulations, policies and land use plan by renewing the term grazing permit for authorization #2704544 with new terms and conditions for grazing use that conform to guidelines and achieve rangeland health standards for Nevada's Northeastern Great Basin Area.

The current livestock grazing permit was issued in 2009 under the authority of Section 426, Public Law 111-8 as a result of a settlement negotiated between the U.S. Department of Justice and Western Watersheds Project to resolve litigation (WWP v. Lane, Case No. 07-CV-394-BLW) until such time as BLM could complete its processing of a new term grazing permit.

1.3. Scoping, Public Involvement and Issues:

The term permit 2704544 renewal proposal was internally scoped by the Egan Field Office ID Team/Resource Specialists on December 6, 2010 to identify any relevant issues.

A letter notifying the permittee of the term permit renewal was sent on December 7, 2010.

Tribal Coordination Letters were sent out December 29, 2010 for this project notifying the tribes of a 30-day comment period. No comments were received.

A letter notifying interested public of this term permit renewal was sent on December 16, 2010. This project proposal was posted on the eGov for Planning and NEPA (ePlanning Front Office) website on February 1, 2011. No public scoping comments were received.

This environmental assessment (EA), with the South Butte and South Butte Seeding Allotment SDD's (see Appendix B), is being provided for a thirty-day external review/public comment period.

This page intentionally
left blank

Chapter 2. Proposed Action and Alternatives

This page intentionally
left blank

2.1. Description of the Proposed Action:

The purpose for the action is to fully process and renew the grazing term permit for Authorization #2704544 on the South Butte (00504) and South Butte Seeding (00506) Allotments. The South Butte Allotment encompasses approximately 26,081 public land acres and the South Butte Seeding Allotment encompasses approximately 968 public land acres. Changes to the permit are recommended to achieve the Standards and Guidelines for Nevada's Northeastern Great Basin Area on the South Butte and South Butte Seeding Allotments (Appendix B (p. 43))

Proposed Term Permit

The renewal of the term grazing permit would be for a period of up to 10 years. If base property is transferred during this ten year period with no changes to the terms and conditions the new term permit would be issued for the remaining term of this term permit.

The proposed term permit for authorization 2704544 and terms and conditions are as follows:

This would remain a cattle permit with a permitted use grazing preference of 850 AUMs from April 15 to February 28 on the South Butte and South Butte Seeding Allotments. Of the 850 AUMs, 641 AUMs would continue to be active use and 209 AUMs would continue to be suspended nonuse.

Changes to "Terms and Conditions Specific to Each Allotment," "Other Terms and Conditions," and "Additional Stipulations Common to All Grazing Allotments" have been made as described below. Recommended changes within the SDD's have been brought forward within the proposed term permit.

Table 2.1. Summary of the Proposed Grazing Permit for Authorization #2704544

Allotment Name and Number	Livestock Number/Kind	Grazing Period Begin End	% Public Land ¹	Type Use	AUMs ²
South Butte (00504)	37 Cattle	04/15 to 2/28	100	Active	389
South Butte Seeding (00506)	40 Cattle	05/01 to 10/31	100	Active	242
Allotment AUMs Summary					
Allotment Name	ACTIVE AUMS		SUSPENDED AUMS	GRAZING PERMITTED USE	
South Butte	396		112	508	
South Butte Seeding	245		97	342	

¹% Public Land is the percent of public land for billing purposes.

²AUMs may differ from Active Permitted Use due to a rounding difference with the number of livestock and the period of use.

1. Mandatory Terms and Conditions Specific to Each Allotment

a. **South Butte Allotment (00504):**

- The season of use on the South Butte Allotment would be 04/15 to 02/28 with a total active use of 396 AUMs.

- The total number of AUMS that can be licensed from 4/15 to 6/15 is 10% of the active preference (39 AUM's) to prevent over-utilization of key forage species during the critical growing season.

- Maximum allowable use levels will be established as follows:

- Perennial grasses: 50% current year's growth.

This use level is necessary to allow desirable key herbaceous species to 1) develop above ground biomass for protection of soils, 2) to contribute to litter cover, and 3) develop roots to improve carbohydrate storage for vigor, reproduction, and improve/increase desirable perennial cover.

- Perennial shrubs and half-shrubs: 50% use on current annual production.

This use level is necessary to allow desirable perennial key browse species to develop branchlets and woody stature able to withstand the pressure of grazing use. Use would be read in April or prior to the spring re-growth. Use during spring contributes to following season's use level.

b. **South Butte Seeding Allotment (00506)**

- The season of use on the South Butte Seeding Allotment would be 05/01 to 10/31 with a total active use of 245 AUMs.

- Maximum allowable use levels will be established as follows:

- Crested wheat grass: 65% current year's growth.

This use level is necessary to allow desirable key herbaceous species to 1) develop above ground biomass for protection of soils, 2) to contribute to litter cover, and 3) develop roots to improve carbohydrate storage for vigor, reproduction, and improve/increase desirable cover.

- Perennial shrubs and half-shrubs: 50% use on current annual production.

This use level is necessary to allow desirable perennial key browse species to develop branchlets and woody stature able to withstand the pressure of grazing use. Use would be read in April or prior to the spring re-growth. Use during spring contributes to following season's use level.

2. **Other Terms and Conditions:**

- Livestock numbers are flexible as long as permitted use (i.e. AUM's) is not exceeded during the authorized season of use.
- Permittee will move livestock to another authorized pasture or from the allotment no later than 5 days following attainment of maximum utilization levels. Any deviation in livestock movement will require authorization from the authorized officer.

- Water hauling may be needed to maintain proper livestock distribution. The location of water hauling sites will be determined by the authorized officer in cooperation with the livestock permittee.
- Water haul site must be at least 1/2 mile from Winterfat dominated sites, known riparian areas, cultural sites and special status species locations.

3. Terms and Conditions Common to All Allotments

- Livestock numbers identified in the Term Grazing Permit are a function of seasons of use and permitted use. Deviations from those livestock numbers and seasons of use may be authorized on an annual basis where such deviations would not prevent attainment of the multiple-use objectives for the allotment.
- Deviations from specified grazing use dates will be allowed when consistent with multiple-use objectives. Such deviations will require an application and written authorization from the authorized officer prior to grazing use.
- The authorized officer is requiring that an actual use report (form 4130-5) be submitted within 15 days after completing your annual grazing use.
- Grazing use will be in accordance with the Standards and Guidelines for Grazing Administration. The Standards and Guidelines have been developed by the respective Resource Advisory Council and approved by the Secretary of the Interior on February 12, 1997. Grazing use will also be in accordance with 43 CFR Subpart 4180 - Fundamentals of Rangeland Health and Standards and Guidelines for Grazing Administration.
- If future monitoring data indicates that Standards and Guidelines for Grazing Administration are not being met, the permit will be reissued subject to revised terms and conditions.
- Pursuant to 43 CFR 10.4 (G) the holder of this authorization must notify the authorized officer by telephone, with written confirmation, immediately upon discovery of human remains, funerary objects, sacred objects, or objects of cultural patrimony (as defined at 43 CFR 10.2). Further, pursuant to 43 CFR 10.4 (C) and (D), you must stop activities in the immediate vicinity of the discovery and protect it from your activities for 30 days or until notified to proceed by the authorized officer.
- The permittee must notify the authorized officer by telephone, with written confirmation, immediately upon discovery of any hazardous or solid wastes as defined in 40 CFR Part 261.
- The permittee is responsible for all maintenance of assigned range improvements including wildlife escape ramps for both permanent and temporary water troughs.
- Salt and/or mineral supplements for livestock must be located at least 1/2 mile from water sources, riparian areas, winterfat bottoms, sensitive sites, and cultural resource sites. Such supplements may be used to encourage livestock distribution. However, feeding of forage products on public rangelands is prohibited.

- When necessary, control or restrict the timing of livestock movement to minimize the transport of livestock-borne noxious weed seeds, roots, or rhizomes between weed-infested and weed-free areas.

2.2. Description of Alternatives Analyzed in Detail:

No Action Alternative

The No Action Alternative represents the status quo – the current permit would be renewed without establishment of allowable use levels or modifications to the permit terms and conditions.

Table 2. Summary of the Current Grazing Permit for Authorization #2704544

Allotment Name and Number	Livestock Number/Kind	Grazing Period Begin End	% Public Land ¹	Type Use	AUMs ²
South Butte (00504)	37 Cattle	04/15 to 2/28	100	Active	389
South Butte Seeding (00506)	40 Cattle	05/01 to 10/31	100	Active	242
Allotment AUMs Summary					
Allotment Name	ACTIVE AUMS		SUSPENDED AUMS	GRAZING PERMITTED USE	
South Butte	396		112	508	
South Butte Seeding	245		97	342	

¹% Public Land is the percent of public land for billing purposes.

²AUMs may differ from Active Permitted Use due to a rounding difference with the number of livestock and the period of use.

Term and Conditions

1. The total number of Animal Unit Months (AUM's) of specified livestock use on the South Butte Seeding Allotment (00506) is 245 AUM's.
2. The season of use on the South Butte Seeding Allotment would be 05/01 to 10/31.
3. The total number of Animal Unit Months (AUM's) of specified livestock use on the South Butte Allotment (00504) is 396 AUM's.
4. The season of use on the South Butte Allotment would be 04/15 to 02/28. However, the total number of AUM's that can be licenced from 04/15 to 06/15 is 10 percent of the active preference to prevent over-utilization of key forage species during the critical growing season.
5. Water hauling is required to maintain proper livestock distribution. The location of water hauling sites will be determined by the authorized officer in cooperation with the livestock permittee.
6. All other term and conditions agreed upon by the BLM and Warren Robison in settling the appeal on the South Butte Allotment (Appeal NV-04-93-6) are made binding on this permit.

7. On the South Butte Allotment (00504): Grazing use will be in accordance with the Northeastern Great Basin Area Standards and Guidelines, and with the Final Multiple Use Decision dated December 24, 1992 and settled on May 27, 1994.
8. On the South Butte Seeding Allotment (00506): Grazing use will be in accordance with the Northeastern Great Basin Area Standards and Guidelines, and with the Final Multiple Use Decision dated January 27, 1992.

Other Terms and Conditions

1. Grazing use will be in accordance with 43 CFR Subpart 4180 - Fundamentals of Rangeland Health and Standards and Guidelines for Grazing Administration.
2. Livestock numbers identified in the Term Grazing Permit are a function of seasons of use and permitted use. Deviations from those livestock numbers and seasons of use may be authorized on an annual basis where such deviations would not prevent attainment of the multiple-use objectives for the allotment.
3. Deviations from specified grazing use dates will be allowed when consistent with multiple-use objectives. Such deviations will require an application and written authorization from the authorized officer prior to grazing use.
4. The authorized officer is requiring that an actual use report (form 4130-5) be submitted within 15 days after completing your annual grazing use.
5. The payment of grazing fees is due on or before the date specified in the grazing bill. This date is generally the opening date of the allotment. If payment is not received within 15 days of the due date, you will be charged a late fee assessment of \$25 or 10 percent of the grazing bill, whichever is greater, not to exceed \$250. Payment with Visa, Mastercard or American Express is accepted. Failure to make payment within 30 days of the due date may result in trespass action.
6. Pursuant to 43 CFR 10.4 (G) the holder of this authorization must notify the authorized officer by telephone, with written confirmation, immediately upon discovery of human remains, funerary objects, sacred objects, or objects of cultural patrimony (as defined at 43 CFR 10.2). Further, pursuant to 43 CFR 10.4 (C) and (D), you must stop activities in the immediate vicinity of the discovery and protect it from your activities for 30 days or until notified to proceed by the authorized officer.
7. If future monitoring data indicates that Standards and Guidelines for Grazing Administration are not being met, the permit will be reissued subject to revised terms and conditions.

2.3. Invasive, Non-Native Species and Noxious Weeds

A Weed Risk Assessment (See Appendix C (p. 45)) was completed on March 8, 2008. The stipulations listed in the Weed Risk Assessment would be followed when grazing occurs on the allotment.

2.4. Monitoring

The Ely District Approved Resource Management Plan (August 2008) identifies monitoring to include, “Monitoring to assess rangeland health standards will include records of actual livestock use, measurements of forage utilization, ecological site inventory data, cover data, soil mapping, and allotment evaluations or rangeland health assessments.” Conditions and trends of resources affected by livestock grazing will be monitored to support periodic analysis/evaluation, site-specific adjustments of livestock management actions, and term permit renewals. Monitoring will determine when grazing will be authorized in burned areas, and will contribute to the selection of prescribed burn treatments or other types of treatments based on attainment of resource objectives” (pg. 88).

2.5. Alternatives Considered but not Analyzed in Detail

The Ely Proposed Resource Management Plan/Final Environmental Impact Statement (FEIS) (November, 2007) analyzes five alternatives of livestock grazing (p.4.16-1 to 4.16-15.). Two of the alternative (Alternatives B and D) were brought forward as being considered but were then dismissed from further analysis in this document.

1. **Alternative B, the maintenance and restoration of healthy ecological systems.**

This alternative would close grazing in all Bighorn Sheep and Desert Tortoise habitat. Portions of the South Butte Allotment are within unoccupied Rocky Mountain Bighorn Sheep habitat and none of the project area is within Desert Tortoise habitat. According to the Nevada Department of Wildlife's Bighorn Sheep Management Plan (Oct. 2001), “livestock, horses, and burros compete directly with bighorns for forage, water and space. It is important that bighorn sheep habitats are managed to ensure land use objectives are achieved and that habitats are maintained in good to excellent ecological condition” (pg. 11). The Bighorn Sheep Management Plan also states as a management action, “the Division will encourage and support land management decisions and resource management techniques that result in the attainment of good to excellent ecological condition on public and private lands” (pg. 12). The proposed action works to maintain or improve habitat conditions toward those described in the Standards and Guidelines for Nevada's Northeastern Great Basin Area and the Ecological Site Descriptions.

In addition, the Standards Determination Document (SDD) for the South Butte and South Butte Seeding Allotments did not identify any resource concerns or recommendations in which Alternative B would be needed to achieve the district goals and objectives as well as achieve the rangeland health standards and was not a reasonable alternative. The design features of the proposed action would essentially accomplish the goal for Alternative B by progressing towards or achieving rangeland health standards which would also maintain and restore habitat conditions and watershed function and health while still meeting the goal for the Ely District RMP, which states, “Manage livestock grazing on public lands to provide for a level of livestock grazing consistent with multiple use, sustained yield, and watershed function and health” and “To allow livestock grazing to occur in a manner and at levels consistent with multiple use, sustained yield, and the standards for rangeland health (p 85-86).”

2. **Alternative D, No Grazing Alternative**

The no grazing alternative does not meet the purpose and need for the action. In addition, this action is not consistent with existing regulation policies, and would not meet the goal for the Ely District RMP, which states, “Manage livestock grazing on public lands to provide for a level of livestock grazing consistent with multiple use, sustained yield, and watershed function and health.” In addition, “To allow livestock grazing to occur in a manner and at levels consistent with multiple use, sustained yield, and the standards for rangeland health (p 85-86).” The SDD for the South Butte and South Butte Seeding Allotments did not identify any resource concerns or recommendation in which Alternative D would be needed or be a reasonable alternative to achieve these goals or achieve the rangeland health standards.

A study done by Courtois et al. (2004) found that 65 years of protection from grazing on 16 exclosures at different locations across Nevada resulted in relatively few differences between vegetation inside the exclosures and those exposed to moderate grazing outside the exclosures. Where differences did occur, total vegetation cover was greater inside the exclosures while density was greater outside the exclosures. Protection from grazing failed to prevent the expansion of cheatgrass and was generally more dense inside exclosures than outside. The current habitat conditions would likely continue with the possibility of temporary improvements due to favorable precipitation (Courtois et al. 2004) (West et al. 1984).

The design features of the proposed action could accomplish the goal for the Ely District by allowing sustainable livestock grazing while progressing towards or achieving rangeland health standards which would also maintain and restore watershed function and health.

2.6. Conformance

● Proposed Action

The proposed action is in conformance with the Ely District Record of Decision and Approved Resource Management Plan signed August 20, 2008, which states, “Manage livestock grazing on public lands to provide for a level of livestock grazing consistent with multiple use, sustained yield, and watershed function and health.” In addition, “To allow livestock grazing to occur in a manner and at levels consistent with multiple use, sustained yield, and the standards for rangeland health (p 85-86).”

Management Action LG-1 states, “Make approximately 11,246,900 acres and 545,267 animal unit months available for livestock grazing on a long-term basis.”

Management Action LG-5 states, “Maintain the current grazing preference, season-of-use, and kind of livestock until the allotments that have not been evaluated for meeting or making progress toward meeting the standards or are in conformance with the policies are evaluated. Depending on the results of the standards assessment, maintain or modify grazing preference, seasons-of-use, kind of livestock and grazing management practices to achieve the standards for rangeland health. Changes, such as improved livestock management, new range improvement projects, and changes in the amount and kinds of forage permanently available for livestock use, can lead to changes in preference, authorized season-of-use, or kind of livestock. Ensure changes continue to meet the RMP goals and objectives, including the standards for rangeland health.”

● No Action Alternative

The no action alternative is in conformance with the Ely District Record of Decision and Approved Resource Management Plan signed August 20, 2008, which states, “Manage livestock grazing on public lands to provide for a level of livestock grazing consistent with multiple use, sustained yield, and watershed function and health.” In addition, “To allow livestock grazing to occur in a manner and at levels consistent with multiple use, sustained yield, and the standards for rangeland health (p 85-86).”

Management Action LG-1 states, “Make approximately 11,246,900 acres and 545,267 animal unit months available for livestock grazing on a long-term basis.”

Management Action LG-5 states, “Maintain the current grazing preference, season-of-use, and kind of livestock until the allotments that have not been evaluated for meeting or making progress toward meeting the standards or are in conformance with the policies are evaluated. Depending on the results of the standards assessment, maintain or modify grazing preference, seasons-of-use, kind of livestock and grazing management practices to achieve the standards for rangeland health. Changes, such as improved livestock management, new range improvement projects, and changes in the amount and kinds of forage permanently available for livestock use, can lead to changes in preference, authorized season-of-use, or kind of livestock. Ensure changes continue to meet the RMP goals and objectives, including the standards for rangeland health.”

1. Relationship to Other Plans

The proposed action is consistent with the following Federal, State, and local plans to the maximum extent possible.

- White Pine County Portion (Lincoln/White Pine Planning Area) Sage-grouse Conservation Plan (2004)
- State Protocol Agreement between the Bureau of Land Management, Nevada and the Nevada Historic Preservation Office (2009)
- Northeastern Great Basin Area Resource Advisory Council (RAC) Standards and Guidelines (1997)
- Mojave-Southern Great Basin Resource Advisory Council (RAC) Standards and Guidelines (2006)
- Wilderness Act – 1964
- Migratory Bird Treaty Act (1918 as amended) and Executive Order 13186 (1/11/01)
- White Pine County Land Use Plan (2007)
- White Pine County Elk Management Plan (2007 revision)

2. Tiering

This document is tiered to the Ely Proposed Resource Management Plan/Final Environmental Impact Statement (November 2007).

Chapter 3. Affected Environment:

This page intentionally
left blank

3.1 Project Area Description

The project area is defined by the South Butte and South Butte Seeding Allotments boundaries (see Appendix A, *Maps* (p. 41) and Figure 1, “South Butte and South Butte Seeding Allotments.” (p. 41)). This area is typical of the Great Basin with elevations ranging from approximately 6,000 feet in the valley bottoms to approximately 8,000 feet in the mountain range. Precipitation ranges from five to over 12 inches varying largely with elevation.

3.2 Resources/Concerns Considered for Analysis

The following items have been evaluated for the potential for significant impacts to occur, either directly, indirectly, or cumulatively, due to implementation of the proposed action. Consideration of some of these items is to ensure compliance with laws, statutes or Executive Orders that impose certain requirements upon all Federal actions. Other items are relevant to the management of public lands in general and to the Ely BLM in particular.

Resource/Concern Considered	Issue(s) Analyzed	Rationale for Dismissal from Analysis or Issue(s) Requiring Detailed Analysis
Air Quality	No	Air quality in the affected area is considered good except for during the occasional dust storm. The proposed action would contribute to ambient dust in the air due to trailing, but the impact would be temporary and would not approach a level that would exceed any air quality standards. Further analysis is not necessary.
Areas of Critical Environmental Concern (ACEC)	No	No ACEC's occur within or adjacent to project area.
Cultural Resources	No	A Cultural Resource Needs Assessment (NV04-08-086) was prepared. Under the BLM/SHPO Protocol, Appendix F:K.A.7 process it was determined that there are no adverse effects with the renewal of this permit.
Forest Health	No	Resource is not present within project area.
Rangeland Health	Yes	Analyzed in EA.
Migratory Birds	No	While overgrazing can lead to detrimental changes in nesting habitat for migratory birds, or nests can be trampled, the proposed grazing practices outlined in this document may reduce the likelihood of these things occurring. A list of bird species which are likely to occur in these allotments can be found in Appendix C.
Native American Religious Concerns and other concerns	No	No traditional religious or cultural sites have been identified within or adjacent to the proposed project area.
FWS Listed or proposed for listing Threatened or Endangered Species or critical habitat.	No	There are no Threatened or Endanger species listed or proposed for listing known to occur within the project area.

Resource/Concern Considered	Issue(s) Analyzed	Rationale for Dismissal from Analysis or Issue(s) Requiring Detailed Analysis
Wastes, Hazardous or Solid	No	The proposed action or alternatives would not produce hazardous or solid waste.
Water Quality, Drinking/Ground	No	Water sources are not included on the State of Nevada 303 (d) list of impaired waters. No drinking water sources occur on public land. Domestic water wells very likely occur associated with ranch facilities on private land. Proposed Action and Alternatives would not affect groundwater sources. The Proposed Action and Alternatives would not lead to changes in riparian streambank condition to cause degradation in water quality.
Wilderness	No	No Wilderness occurs within or adjacent to the project area. No further analysis is necessary.
Environmental Justice	No	No minority or low-income groups would be disproportionately affected by health or environmental effects. Concern is not present.
Floodplains	No	The analysis area is not included in FEMA flood maps.
Watershed Management	No	Impacts from livestock grazing on Watershed Management was discussed in the Ely Proposed Resource Management Plan/Final Environmental Impact Statement (November 2007). The physical, biological, and chemical components which define a watershed in terms of its function, health, and vegetative resilience would not be affected by the proposed action or alternatives. The interrelationships between the physical constituents in the watersheds and affects to vegetative components would not be altered. No further analysis is required.
Wetlands/Riparian Zones	No	The condition, health, and function of riparian systems on public land would not change with the selection of the Proposed Action or Alternatives. Riparian areas would be used by livestock during approved time periods and rested with no livestock use in early spring. No change to existing condition is anticipated with selection of any alternative. The riparian areas that were assessed met the criteria for proper functioning condition and the current livestock management would be carried forward. No detailed analysis is needed.
Noxious and Invasive Weed Management	No	Thistles and hoary cress occur within the project area along roads. Although improper grazing can increase the populations of the noxious and invasive weeds already present in the permitted area, the design features of the Proposed Action, including setting utilization levels of native species, would help to prevent weeds from establishing or spreading. The no grazing alternative would prevent livestock from being weed vectors, but would not eliminate weed spread or establishment since other vectors such as vehicles, wind, wildlife and water could still spread weeds. The no action alternative would be similar to the proposed action, except it lacks the design features of the proposed action to prevent weeds. No further analysis is necessary.
Special Status Plant Species, other than those listed or proposed by the FWS as Threatened or Endangered	No	Resource not known to be present.

Resource/Concern Considered	Issue(s) Analyzed	Rationale for Dismissal from Analysis or Issue(s) Requiring Detailed Analysis
Wild Horses	No	Impacts from livestock grazing on Wild Horses are analyzed on page 4.8-6 of the Proposed Resource Management Plan/Final Environmental Impact Statement (November 2007). All of the South Butte Allotment and none of the South Butte Seeding Allotment are within the Triple B Wild Horse Herd Management Area (HMA). Site specific examination of the allotments did not reveal any concerns above those addressed in the EIS.
Soil Resources	No	Trailing of livestock and concentration near watering sources and mineral supplements may support the continued existence of areas with soil compaction and disturbance condition. The Alternatives do not propose changes to use patterns or disturbance in new locations in the analysis area. No detailed analysis is necessary.
Prime and Unique Farmlands	No	Approximately 571 acres of potential Prime Farmland occurs in the northeastern portion of the South Butte Allotment. This soil, if irrigated, would be considered a Prime Farmland. The Alternatives would not alter the unique physical or chemical characteristics and thus the nature of the Heist soil association or its potential to become Prime Farmland. No detailed analysis is necessary.
Visual Resource Management (VRM)	No	The proposed project area is within VRM Classes III & IV. The proposed action is consistent with the VRM Class objectives for this area, therefore no direct or cumulative impacts to visual resources are anticipated.
Special Status Animal Species, other than those listed or proposed by the FWS as Threatened or Endangered	Yes	Impacts to sage grouse are analyzed in chapter 4. There is possibly one known population of the pygmy rabbit (<i>Brachylagus idahoensis</i>) in the South Butte Allotment and potentially suitable habitat in the eastern portions of the allotment. Suitable habit for the pygmy rabbit is found in areas with relatively tall sagebrush growing in deep soils which are friable and suitable for digging burrows. The US Fish and Wildlife has found that there is not enough information available at the current time to propose the species for listing. While there is not enough information available on the effects of grazing on the rabbit, keeping the amount of grazing at appropriate levels may help to prevent degradation of pygmy rabbit habitat. Therefore, further analysis will not be conducted in this EA.
Fish and Wildlife	No	General habitat could be maintained or improved by the proposed action or alternatives.
Lands and Realty	No	There are no conflicting Right-of-Ways within project area.
Recreation Uses	No	The proposed Silver State OHV Trail for White Pine County crosses into the proposed project area. If the OHV trail is designated, a slight increase in traffic during the summer months may occur. Overall, the proposed action would result in no impacts to recreational activities.
Paleontological Resources	No	Currently there are no identified resources within this allotment.

Resource/Concern Considered	Issue(s) Analyzed	Rationale for Dismissal from Analysis or Issue(s) Requiring Detailed Analysis
Mineral Resources	No	No mineral operations occur within the project area
Vegetative Resources	No	The proposed action is expected to have an effect on vegetative resources as follows: grazing of vegetation, primarily grasses and winterfat, and occasional trampling of vegetation as livestock move through it. The impacts to vegetation by grazing or trampling based on the proposed action with design features would result in maintaining or improving plant health, reproduction, diversity, and composition by allowing the plants to maintain and continue photosynthetic processes to initiate regrowth for recovery and grow adequately for reproduction. The no action alternative would be similar to the proposed action, but lacks the design features to improve plant health. No further analysis is necessary.
Wild and Scenic Rivers	No	No Wild and Scenic Rivers occur within or adjacent to the project area.

3.3.1 Affected Environment

Rangeland Health

The South Butte and South Butte Seeding Allotments occur within the Northeastern Great Basin Area Resource Advisory Council (RAC) area. The Standards and Guidelines reflect the stated goals of improving rangeland health while providing for the viability of the livestock industry, all wildlife species, and wild horses and burros in the Northeastern Great Basin Area. Standards are expressions of physical and biological conditions required for sustaining rangelands for multiple uses. Guidelines point to management actions related to livestock grazing for achieving the Standards. For each grazing permit renewal, BLM conducts an allotment evaluation and standards determination analysis in the form of a Standards Determination Document (SDD) to determine if the current livestock grazing management practices in place are achieving the Standards and conforming to the Guidelines. If the Standards assessed are not achieved, a determination is made if significant progress is being made towards Standard achievement and if current livestock grazing is a significant contributing factor to not achieving the standard. The results of these assessments are summarized in Table 1 (p. 7) and Appendix B (p. 43), South Butte and South Butte Seeding SDD. The SDD provided recommendations to continue livestock grazing on both allotments as well as to establish allowable use levels and stipulations regarding the placement of salt/mineral supplements.

Generally, major plant communities across the project area show a tendency for shrub dominance with a limited herbaceous understory. This is believed to be a stable state for these plant communities. The transition into this state was due largely to heavy grazing that occurred throughout the west in the early 20th century (pre-Taylor Grazing Act). Altered natural disturbance regimes (fire cycles, etc.) and climate conditions also have played a role in this transition. Over the past 100 years, livestock grazing has been significantly reduced to current level. Current grazing management is focused on improving conditions to meet or make progress towards the standards for rangeland health while providing for multiple use, sustained yield, and watershed function and health.

3.3.2 Affected Environment

Special Status Animal Species

Greater Sage Grouse

The greater sage-grouse (*Centrocercus urophasianus*) is a high-profile Sensitive Species that has been determined to be warranted for listing but which is precluded by other species of higher priority (Federal Register /Vol. 75, No. 55 /Tuesday, March 23, 2010). It has been identified as an “umbrella” species by the Ely District BLM, and chosen to represent the habitat needs of the sagebrush (*Artemisia spp.*) obligate or sagebrush/woodland dependent guild (BLM 2007; p. 4.7-10).

There is one inactive sage grouse lek and one lek in which the activity status is unknown in the South Butte Allotment. There are two active leks and one lek in which the activity status is unknown within a three mile radius of the South Butte Allotment (SDD Appendix B, Figure 6). The South Butte Seeding Allotment does not have any known lek sites, but there are 3 known lek site within a 3 mile radius of the allotment boundaries. Of the 3 lek sites, two are in an unknown activity status, and one is inactive. The South Butte and South Butte Seeding Allotments contain winter, summer and nesting habitat. Sage grouse often nest in suitable habitat within three miles of a lek site. The sage grouse strutting and nesting period is generally considered to be March 15 through May 31. The brood rearing period is generally considered to be June 1 through October 31. The wintering period is generally considered to be November 1 through March 14. All of the project area is located within the Butte Valley Population Management Unit (PMU). Under the sage-grouse guidelines, the herbaceous component (grass and forb combined) should comprise at least 15% of the vegetative community by cover, and sagebrush should comprise at least 15-25% of vegetative cover (Connelly et al. 2000). Sagebrush habitats were evaluated against the Connelly Guidelines in the SDD (Appendix B). The majority of the South Butte Allotment is not meeting the herbaceous understory requirements needed to achieve the rangeland health standards although the South Butte Seeding Allotment is. In addition, the allotments are meeting the vegetative recommendations for wildlife habitat in sagebrush plant communities set forth in the Ely District Approved Resource Management Plan which states “Sagebrush in the mid-late phase of the herbaceous state is desired for wildlife habitat.”

This page intentionally
left blank

Chapter 4. Environmental Effects:

This page intentionally
left blank

4.1 Direct and Indirect

4.1.1 Rangeland Health

1. **Proposed Action**

The proposed action is based largely on the recommendations of the Standards Determination Document completed for the South Butte and South Butte Seeding Allotments. The proposed action is designed to allow for continued achievement of or progress towards Standards for Rangeland Health. The proposed action would have a spring to fall season of use (05/01–10/31) on the South Butte Seeding Allotment and a spring to winter season of use (04/15–02/28) on the South Butte Allotment. Limited spring grazing, when plants are most susceptible to grazing impacts, is allowed under the proposed action with stipulation regarding the amount of AUM's that would be allowed to be used in the critical growing season on the South Butte Allotment would be included in the permit. This season of use allows for greater flexibility in the grazing operation based on annual range conditions (i.e. forage availability, snow cover, water, etc.).

The proposed action also incorporates maximum allowable use levels. Allowable use levels allow for desirable key species to retain above ground biomass to continue photosynthetic processes and develop roots to improve carbohydrate storage for vigor, reproduction, and improve/increase desirable perennial cover as well as to contribute to litter cover for soil protection and health. It has been suggested that the amount of forage removed is not nearly as important as the amount of residue that remains to permit photosynthesis, plant recovery and soil protection (McGinty et al. 2009). These levels allow for flexibility to accommodate annual range conditions, prevent overgrazing, and safe-guard residual forage for wildlife habitat, plant recovery and productivity, litter and watershed function. The establishment of these levels also allows for better management of rangeland resources because they are tied to forage availability rather than a set AUM amount.

The terms and conditions in the proposed action could assist in reducing the impacts of grazing on grasses and forbs and is expected to increase plant health, reproduction, diversity and composition by allowing the plants to maintain and continue photosynthetic processes, recover and grow adequately for reproduction and maintain ecological processes (i.e. resource competition, infiltration, nutrient cycle, ect.) (Anderson and McCuistion, 2008). A stipulation regarding the removal of livestock when allowable use levels have been met would be added to the permit to ensure these levels are not exceeded. In addition, specific stipulations regarding the placement of livestock supplements would be added to this permit to improve distribution and protect sensitive ecological sites and riparian areas from over use and trampling which could also assist in the overall achievement of the Standards for Rangeland Health.

The proposed action would allow native and desirable non-native plant communities to maintain or improve their health as well as protect and maintain healthy, productive soils and riparian sites. These management practices would provide a good opportunity to achieve and make significant progress toward achieving Standards for Rangeland Health by maintaining or improving key ecological processes and native vegetative composition.

2. **No Action Alternative**

The current status of rangeland health would likely continue because no changes would be made to the current permit. The current permit would have a spring to fall season of use (05/01–10/31) on the South Butte Seeding Allotment and a spring to winter season of use (04/15–02/28) on the South Butte Allotment. The current permit does include limited grazing use in the spring on the South Butte Allotment which could assist in maintaining native plant vigor, production, structure, composition, diversity and cover as well as soil conditions. The current permit would not include establishing allowable use levels on forage or stipulations regarding the placement of salt/mineral supplements on either allotment. The current impacts to vegetation, soils and riparian areas by grazing or trampling based on the current permit would likely continue at the current levels. Riparian and other sensitive ecological sites may not receive additional protection from grazing or trampling because stipulations regarding the placement of salt/mineral supplements would not be added.

The current permit was designed to achieve or progress towards rangeland health standards, but does not employ all of the available tools to improve rangeland health conditions to the degree which could result from the proposed action. The overall vegetative, soil and riparian health conditions would likely continue at the current levels and would not likely be improved to the degree which could result from the proposed action. The no action alternative (current permit) would likely not provide as good of an opportunity to achieve and make significant progress toward achieving Standards for Rangeland Health as would the proposed action.

4.1.2 Special Status Animal Species: Sage-Grouse

1. Proposed Action

The proposed action is expected to maintain or improve habitat conditions for sage-grouse. The proposed action establishes allowable use levels on all allotments which would be beneficial in providing perennial grass, forb and shrub cover for sage-grouse habitat. Allowable use levels allow for desirable key species to retain above ground biomass to continue photosynthetic processes and develop roots to improve carbohydrate storage for vigor, reproduction, and improve/increase desirable perennial cover as well as to contribute to litter cover for soil protection and health. It has been documented that historic grazing practices have contributed to current habitat conditions (Beck and Mitchell, 2000) (Crawford et al, 2004), and that poorly managed livestock grazing can lead to poor habitat conditions. Research has also demonstrated that properly designed and managed grazing plans can maintain and improve sage-grouse habitat. Light to moderate grazing (30%–50% utilization) can increase forb quality and quantity. Properly timed grazing can delay forb maturation and extends the availability of high quality forage throughout the season. A light to moderate stocking rate can help maintain the grassy understory used by the sage-grouse for cover while controlling the sagebrush that is needed for nesting (Anderson and McCuiston, 2008) (Vavra, 2005). A stipulation regarding the removal of livestock when allowable use levels have been met would be added to the permit to ensure these levels are met. In addition, specific stipulations regarding the placement of livestock supplements would be added to this permit on all allotments to improve distribution and protect sensitive ecological sites and riparian areas from over use and trampling, which could also assist in the overall achievement of the Standards for Rangeland Health. Insofar as the proposed action works to move sagebrush community conditions toward those described in the

Standards and Guidelines for Nevada's Northeastern Great Basin Area and the Ecological Site Descriptions, it would also benefit sage-grouse.

2. **No Action Alternative**

The current impacts to special status animal species, including sage-grouse would likely continue. The current permit does not establish allowable use levels or stipulations regarding the placement of salt/mineral supplements which could result in excessive grazing or trampling of perennial grasses, forbs, sage brush and riparian habitat from poor livestock distribution and forage utilization.

The no action alternative would likely not provide as good of an opportunity to achieve and make significant progress toward achieving Standards for Rangeland Health or improve habitat conditions as would the proposed action.

4.2 Cumulative Effects

According to the 1994 BLM publication (attached to WO-IB-94-310) “Guidelines for Assessing and Documenting Cumulative Impacts, “The cumulative analysis can be focused on those issues and resource values identified by management, the public and others during scoping that are of major importance.”

Additionally, the guidance provided in The National BLM NEPA Handbook H-1790-1 (2008), for analyzing cumulative effects issues states, “determine which of the issues identified for analysis may involve a cumulative effect with other past, present, or reasonably foreseeable future actions. If the proposed action and alternatives would have no direct or indirect effects on a resource, you do not need a cumulative effects analysis on that resource” (p.57). Also, a comprehensive cumulative impacts analysis can be found on pages 4.28-1 through 4.36-1 of the Ely Proposed Resource Management Plan/Final Environmental Impact Statement (November 2007).

The Cumulative Effects Study Area (CESA) on rangeland health and special status animal species including sage-grouse is defined as the South Butte and South Butte Seeding Allotments.

1. **Past Activities**

Livestock grazing has a long history in the region dating back to the late 1800's. Throughout its history, livestock grazing has been characterized by localized areas of intense use. Range improvements have occurred on the allotment to improve grazing management and include fencing and stockwater developments. Wild horse use has also occurred within the area since the late 1800's. In 1986, two wildfires burned small portions of the South Butte Allotment. Hunting, trapping, wildlife viewing, OHV use and other activities have also occurred on these allotment year round.

2. **Present Activities**

Currently, the allotments are authorized for cattle grazing use by one livestock operator, authorization #2704544. Maintenance of range improvements is ongoing. Wild horses currently use portions of the South Butte Allotment. Hunting, trapping, wildlife viewing, OHV use and other activities currently occur on the allotments year round.

3. **Reasonably Foreseeable Future Activities (RFFA)**

Transportation activities, including existing road maintenance, livestock grazing and wild horse use would likely continue within the CESA. Wildfires could occur also within the allotments. Recreational activities such as hunting, trapping, wildlife viewing, OHV use and other activities will likely occur in the CESA year round. Maintenance of range improvements would be ongoing. New range improvement projects are considered on an annual basis and analyzed separately on a site specific basis. One well with two storage tanks and four stock water troughs as well as an allotment boundary drift fence have been proposed to occur within the CESA. A habitat improvement project has been proposed to occur within the eastern bench of the South Butte Allotment. This project would consist of Pinyon Pine and Juniper tree removal from sage brush steppe ecological sites on approximately 4,000 acres of public lands. The Silver State OHV Trail has been proposed to be designated through the South Butte Allotment. In addition, the SWIP transmission line corridor has also been planned to cross through the South Butte Allotment. The Silver State OHV Trail and the SWIP transmission line corridor may increased traffic on existing roads and trails with the potential of increased off-road travel which can create new roads and could also increase tampering with range improvement projects and possibly increased human-wildlife interactions.

4.3 Cumulative Effects Summary

4.3.1 Rangeland Health

1. Proposed Action

The proposed action, in combination with any RFFA, is expected to continue to achieve or progress towards meeting rangeland health standards within the CESA. As the proposed action works to continue to achieve or progress toward the rangeland health standards, it would benefit soil, vegetative and riparian resources within the CESA and assist in improving rangeland health.

2. No Action Alternative

The No Action Alternative, in combination with any RFFA, would likely maintain the current status of rangeland health with very limited opportunities to improve conditions.

4.3.2 Special Status Animal Species

1. Proposed Action

The proposed action, in combination with any RFFA, is designed and expected to continue to achieve or progress towards meeting rangeland health standards which would also benefit sage-grouse habitat within the CESA. The proposed action in combination with the RFFA are not anticipated to have any cumulative effects on sage-grouse habitat.

2. No Action Alternative

The combined effects of the current permit and the RFFA to sage-grouse habitat would likely remain the same to those currently existing in the CESA and no improvements to habitat would likely be made.

Chapter 5. Tribes, Individuals, Organizations, or Agencies Consulted:

This page intentionally
left blank

The following persons, groups, and agencies were contacted during the preparation of this document.

Permittees

Authorization #2704544

Nevada Department of Wildlife

Alan Jenne

Tribal Consultation

Tribal Coordination Letters were sent out December 29, 2010 for this project notifying the tribes of a 30-day comment period. No comments were received.

Public Notice of Availability

The Ely District Office mails an annual Consultation, Cooperation, and Coordination (CCC) letter to individuals and organizations that have expressed an interest in rangeland management related actions. Those receiving the annual CCC letter have the opportunity to request from the Field Office more information regarding specific actions. The following individuals and organizations, who were sent the annual CCC letter on December 16, 2010, have requested additional information regarding rangeland related actions or programs within the South Butte and South Butte Seeding Allotments:

- University of Nevada Cooperative Extension, Dan R. Nelson
- Nevada Department of Wildlife, Alan Jenne
- Nevada Department of Wildlife, Curtis Baughman
- Duckwater Shoshone Tribe
- Thelora Warr
- Western Watersheds Project
- U.S. Fish and Wildlife Service, Jill Ralston
- Jacob Carter
- N-4 Grazing Board
- Eastern Nevada Landscape Coalition, Betsy Macfarlan
- Nevada State Clearinghouse (electronic copy only)

The above interested persons and organizations on the Ely District Rangeland Management Interested Public List will be provided a copy of the preliminary EA with the draft South Butte and South Butte Seeding Allotments SDD for review and comment.

This page intentionally
left blank

Chapter 6. List of Preparers

This page intentionally
left blank

Table 6.1. List of Preparers

Name	Title	Responsible for the Following Section(s) of this Document
TJ Mabey	Range Technician	Rangeland Health/Project Lead
Mark D'Aversa	Hydrologist/Soil Scientist	Soils, Riparian & Wetlands, Air Quality, Water Quality
Mindy Seal	Natural Resource Specialist	Vegetative Resources/Noxious and Invasive weeds
Lisa Gilbert	Archeologist Technician	Archeological/Paleontological Resources
Ruth Thompson	Wild Horse Specialist	Wild Horses
Marian Lichtler	Wildlife Biologist	Wildlife/Migratory Birds/Special Status Plants & Animals
Erin Rajala	Outdoor Recreation Planner	Recreation/VRM
Miles Kredler	Geologist	Minerals
Melanie Peterson	Environmental Protection Specialist	Hazardous Waste
Gina Jones	Ecologist/NEPA Coordinator	Environmental Justice

This page intentionally
left blank

Chapter 7. References

This page intentionally
left blank

Bibliography

- Anderson, Austin, Kimberly C. McCuistion. 2008. Evaluating Strategies for Ranching in the 21st Century: Successfully Managing Rangeland for Wildlife and Livestock. *Rangelands*, 30 (2): 8-14..
- Anderson, E. William. 1993. Prescription grazing to enhance rangeland watersheds. *Rangelands*, 15 (1): 31-35.
- Beck, Jeffery L., Dean L. Mitchell. 2000. Influences of Livestock Grazing on Sage Grouse Habitat. *Wildlife Society Bulletin*, 28 (4): 993-1002.
- Briske, D. D. 1991. Developmental morphology and physiology of grasses. Pages 85-108 in R. K. Heitschmidt and J. W. Stuth, editors. *Grazing management: an ecological perspective*. Timber Press, Portland, Oregon, USA..
- Connelly, J. W., M. A. Schroeder, A. R. Sands, and C. E. Braun. 2000. Guidelines to manage sage-grouse populations and their habitats. *Wildlife Society Bulletin* 28: 967-985..
- Cook, C.W. 1985. Biological efficiency from rangelands through management strategies. *Proc. Conf. on Multi-species Grazing*. Winrock International. Morrilton, AR p. 54. .
- Courtois, Danielle R., Barry L. Perryman, Hussein S. Hussein. 2004. Vegetation Change after 65 Years of Grazing and Grazing Exclusion. *Journal of Range Management*. 57 (6): 574-582..
- Crawford, John A., Rich A. Olson, Neil E. West, Jeffrey C. Mosley, Michael A. Schroeder, Tom D. Whitson, Richard F. Miller, Michael A. Gregg, and Chad S. Boyd. 2004. Synthesis Paper: Ecology and management of sage-grouse and sage-grouse habitat. *Journal of Range Management*. 57: 2-19..
- Floyd T, Elphick CS, Chisholm G, Mack K, Elston RG, Ammon EM, and Boone JD. 2007. *Atlas of the Breeding Birds of Nevada*. Reno: University of Nevada Press. Lincoln County sage-grouse conservation plan. 2004. .
- Glimp, H.A. 1988. Multi-Species Grazing and Marketing. *Rangelands*. 10 (6): 275-278. .
- McGinty, Ellie Leydsman, Ben Baldwin, Roger Banner. 2009. A Review of Livestock Grazing and Range Management in Utah. http://extension.usu.edu/utahrangelands/files/uploads/Literature_Review.pdf.
- Stoneberg, Ron. 2006. The Positive and Negative Impacts of Livestock Grazing on Sage Grouse in Northeastern Montana - a Historical Perspective. In: *Symposia: Prescribed Livestock Grazing to Enhance Wildlife Habitat*. Society for Range Management (SRM) 59th Annual Meeting. Vancouver, British Columbia..
- USDA - NRCS 1997. *National Range and Pasture Handbook*. .
- USDOI. 2007. Ely Proposed Resource Management Plan/ Final Environmental Impact Statement. U.S. Department of the Interior, Bureau of Land Management. BLM/EL/PL-07/09+1793. DOI No. FES07-40. November 2007. .

- USDOI. 2008. Ely District Record of Decision and Approved Resource Management Plan. U.S. Department of the Interior, Bureau of Land Management. BLM/NV/EL/PL-GI08/25+1793.
- USDOI, Bureau of Land Management. 2008. National Environmental Policy Act. Handbook H-1790-1..
- USDOI, Bureau of Land Management. 1994. Guidelines for assessing and documenting cumulative impacts. WO-IB-94-310..
- USDOI - Bureau of Land Management. 1997. Standards and Guidelines for Nevada's Northeastern Great Basin Area..
- USDOI, Nevada Department of Wildlife. 2009. Sage-grouse Leks (GIS data). .
- USDOI, Nevada Department of Wildlife and Bureau of Land Management. 2001. Sage-grouse Nesting, Summer, and Winter Habitat: BLM Ely District RMP 2008 (GIS data)..
- Vavra, Martin. 2005. Livestock Grazing and Wildlife: Developing Compatibilities. Rangeland Ecology & Management, 58 (2): 128-134..
- West, Neil E., Frederick D. Provenza, Patricia S. Johnson, M. Keith Owens. 1984. Vegetation Change after 13 Years of Livestock Grazing Exclusion on Sagebrush Semidesert in West Central Utah. Journal of Range Management, 37 (3): 262-264..
- White Pine County portion (Lincoln/White Pine planning area) sage-grouse conservation plan. Sage-grouse Technical Review Team..

Appendix A. Maps

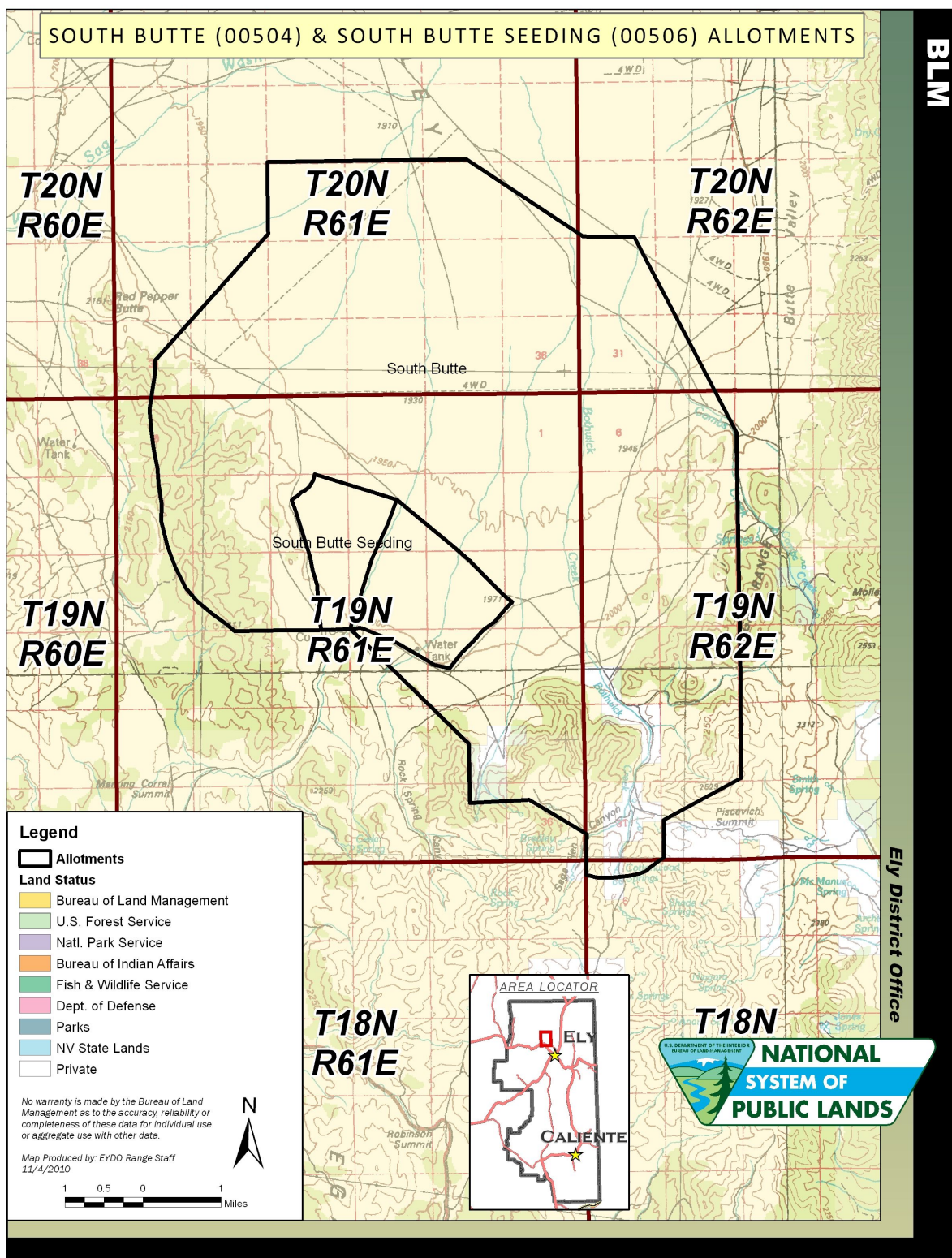


Figure 1. South Butte and South Butte Seeding Allotments.

This page intentionally
left blank

Appendix B. Standards Determination Documents

Please refer to the South Butte and South Butte Seeding Standards Determination Document.

This page intentionally
left blank

Appendix C. WEED RISK ASSESSMENT

Introduction & Summary Of Proposed Action

On March 10th, 2008 a Noxious & Invasive Weed Risk Assessment was completed for the term grazing permit renewal for Authorization #2704544 on the South Butte and South Butte Seeding allotments in White Pine County, NV. South Butte and South Butte Seeding are cattle allotments with a total grazing preference of 850 AUMs. Of these, 641 AUMs are active and 209 AUMs are suspended nonuse. The current season of use is from April 15 to February 28. The term permit would be issued for a period of ten years. The South Butte allotment encompasses 26,081 acres and the South Butte Seeding allotment encompasses 968 acres of BLM administered public lands.

No field weed surveys were completed for this project. Instead the Ely District weed inventory data was consulted. There are currently no mapped weed infestations within the South Butte Seeding allotment. The following species are found within the boundaries of the South Butte allotment: (*Carduus nutans*) Musk thistle (*Cirsium vulgare*) Bull thistle (*Lepidium draba*) Hoary cress (*Onopordum acanthium*) Scotch thistle.

The following species are found along roads and drainages leading to the allotments: (*Acroptilon repens*) Russian knapweed (*Carduus nutans*) Musk thistle (*Centaurea stoebe*) Spotted knapweed (*Cicuta maculata*) Water hemlock (*Cirsium vulgare*) Bull thistle (*Hyoscyamus niger*) Black henbane (*Lepidium draba*) Hoary cress (*Onopordum acanthium*) Scotch thistle (*Sorghum halepense*) Johnsongrass. Both allotments were last inventoried for noxious weeds in 2006. While not officially documented the following non-native invasive weeds probably occur in or around the allotment: cheatgrass (*Bromus tectorum*), halogeton (*Halogeton glomerus*), horehound (*Marrubium vulgare*), bur buttercup (*Ranunculus testiculatus*), and Russian thistle (*Salsola kali*).

While not officially documented, the following non-native invasive weeds probably occur in or around the allotments: cheatgrass (*Bromus tectorum*), halogeton (*Halogeton glomeratus*), horehound (*Marrubium vulgare*), and Russian thistle (*Salsola kali*).

Table C.1. Factor 1 assesses the likelihood of noxious/invasive weed species spreading to the project area.

None (0)	Noxious/invasive weed species are not located within or adjacent to the project area. Project activity is not likely to result in the establishment of noxious/invasive weed species in the project area.
Low (1-3)	Noxious/invasive weed species are present in the areas adjacent to but not within the project area. Project activities can be implemented and prevent the spread of noxious/invasive weeds into the project area.
Moderate (4-7)	Noxious/invasive weed species located immediately adjacent to or within the project area. Project activities are likely to result in some areas becoming infested with noxious/invasive weed species even when preventative management actions are followed. Control measures are essential to prevent the spread of noxious/invasive weeds within the project area.
High (8-10)	Heavy infestations of noxious/invasive weeds are located within or immediately adjacent to the project area. Project activities, even with preventative management actions, are likely to result in the establishment and spread of noxious/invasive weeds on disturbed sites throughout much of the project area.

For this project, the factor rates as Moderate (4) at the present time. The proposed action could increase the populations of the noxious and invasive weeds already within the allotment and could aid in the introduction of weeds from surrounding areas. Within the allotment, watering and salt block sites are of particular concern of new weed infestations due to the concentration of livestock around those sites and the amount of ground disturbance associated with that.

Table C.2. Factor 2 assesses the consequences of noxious/invasive weed establishment in the project area.

Low to Nonexistent (1-3)	None. No cumulative effects expected.
Moderate (4-7)	Possible adverse effects on site and possible expansion of infestation within the project area. Cumulative effects on native plant communities are likely but limited.
High (8-10)	Obvious adverse effects within the project area and probable expansion of noxious/invasive weed infestations to areas outside the project area. Adverse cumulative effects on native plant communities are probable.

This project rates as High (8) at the present time. If new weed infestations establish within the allotment this could have an adverse impact those native plant communities since the allotment is currently considered to be mostly weed-free. Also, any increase of cheatgrass could alter the fire regime in the area.

Table C.3. The Risk Rating is obtained by multiplying Factor 1 by Factor 2.

None (0)	Proceed as planned.
Low (1-10)	Proceed as planned. Initiate control treatment on noxious/invasive weed populations that get established in the area.
Moderate (11-49)	Develop preventative management measures for the proposed project to reduce the risk of introduction of spread of noxious/invasive weeds into the area. Preventative management measures should include modifying the project to include seeding the area to occupy disturbed sites with desirable species. Monitor the area for at least 3 consecutive years and provide for control of newly established populations of noxious/invasive weeds and follow-up treatment for previously treated infestations.
High (50-100)	Project must be modified to reduce risk level through preventative management measures, including seeding with desirable species to occupy disturbed site and controlling existing infestations of noxious/invasive weeds prior to project activity. Project must provide at least 5 consecutive years of monitoring. Projects must also provide for control of newly established populations of noxious/invasive weeds and follow-up treatment for previously treated infestations.

For this project, the Risk Rating is Moderate (32). This indicates that the project can proceed as planned as long as the following measures are followed:

- Prior to entering public lands, the BLM will provide information regarding noxious weed management and identification to the permit holders affiliated with the project. The importance of preventing the spread of weeds to uninfested areas and importance of controlling existing populations of weeds will be explained. • The range specialist for the allotments will include weed detection into project compliance inspection activities. If the spread of noxious weeds is noted, appropriated weed control procedures will be determined in consultation with BLM personnel and will be in compliance with the appropriate BLM handbook sections and applicable laws and regulations. • To eliminate the introduction of noxious weed seeds, roots, or rhizomes all interim and final seed mixes, hay, straw, hay/straw, or other organic products used for feed or bedding will be certified free of plant species listed on the Nevada noxious weed list or specifically identified by the BLM Ely Field Office. • Grazing will be conducted in compliance with the Ely District BLM noxious weed schedules. The scheduled procedures can significantly and effectively reduce noxious weed spread or introduction into the project

area. • Any newly established populations of noxious/invasive weeds discovered will be communicated to the Ely District Noxious and Invasive Weeds Coordinator for treatment.

Reviewed by:

/s/Bonnie Million

Bonnie Million

District Weed Coordinator

3/10/2008

Date
